

# Immunizations/ Vaccine Preventable Diseases

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**Definition:** The standard measure of appropriate immunization for two-year olds are a series of vaccinations that includes 4 doses diphtheria, tetanus, pertussis (DTP or DTaP), 3 doses polio, 1 dose measles, mumps and rubella (MMR), 3 doses haemophilus influenzae type b (Hib) and 3 doses Hepatitis B (4:3:1:3:3).

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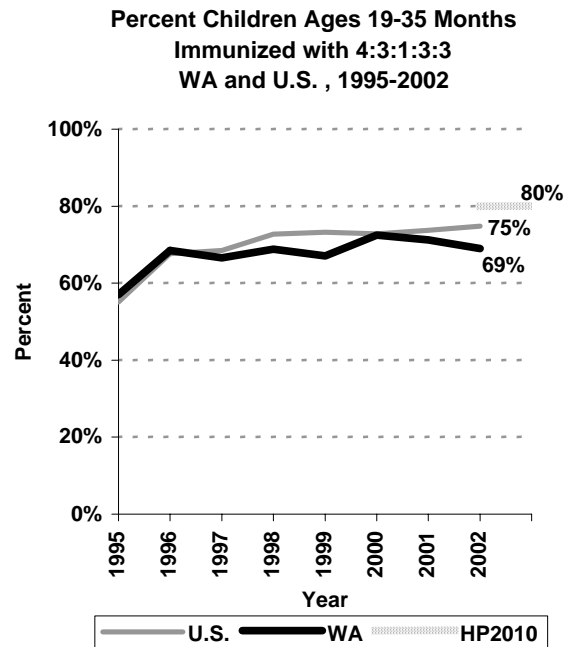
## Key Findings

- ❖ In 2002, estimated vaccination coverage from the National Immunization Survey (NIS) for all recommended immunizations (4:3:1:3:3) among children 19-35 months of age in Washington State was 69.2% ( $\pm 5.0$ ), comparable to the 2001 national rate of 74.8% ( $\pm 1.0$ ).<sup>1</sup>
- ❖ In 2002, Washington partially met its goal to ensure that at least 95 percent of children entering kindergarten or first grade (school entry-level) are adequately immunized. Immunization rates were DTP/DTaP: 90.5%, Polio: 92.5%, Measles: 92.3%, Mumps: 95.0%, Rubella: 95.0%, and Hep B: 95.1%.<sup>2</sup>
- ❖ Underimmunization can occur when needed vaccines are not administered during acute or chronic care medical visits and when multiple vaccines are not given during the same visit. Transportation problems, lack of immunization schedule at home, multiple family moves, multiple providers, and objections to some immunizations may also serve as barriers to adequate immunization. The 4th DPT, recommended to be administered between 15 and 23 months, is the most frequently missed immunization.
- ❖ Washington is one of only 17 states that permit immunization exemptions for school admittance due to personal or philosophical reasons. For school year 2002-2003, 32,529 children were exempt, representing 3.8% of enrolled school-age children statewide. Over 90% of those exemptions were for personal or philosophical reasons. Other exemptions are for medical and religious reasons.<sup>2</sup>
- ❖ The last diphtheria case seen in Washington was in 1979. There have been no recent wild type (non-vaccine related) polio cases in Washington and the last vaccine-related case was in 1993. In Washington State, there have been two cases of tetanus since 1997. Pertussis rates in Washington are high and there have been several years since 1995 when the rates exceeded 7 per 100,000. In 2002, Washington's pertussis incidence rates (9.5/100,000) were the 7th highest in the US and the number of cases showed a 3 fold increase from the number reported in 2001.<sup>3</sup>

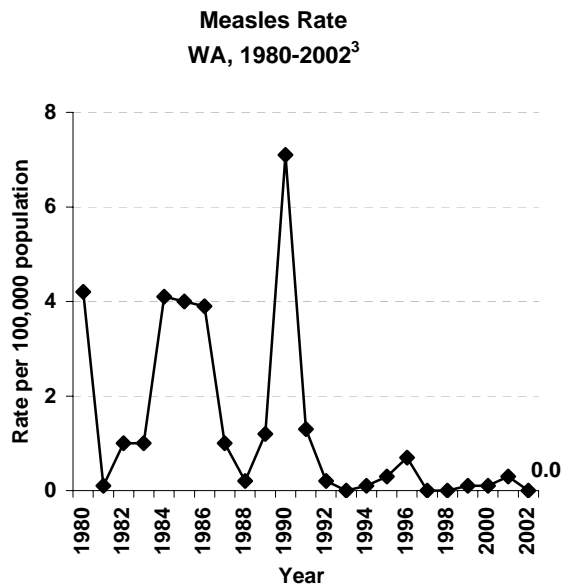
## Immunizations/ Vaccine Preventable Diseases (cont.)

- ❖ In 2002 the NIS estimated the coverage rate for varicella vaccination of children 19-35 months of age in Washington State to be 65.1% (+/- 5.1%). The coverage rates for this vaccine for the State has risen consistently since 1996 when it was 6.4% (+/- 2.2%) but has continued to remain lower than the rate for the United States as a whole which in 2002 was 80.6% (+/- 0.9%).<sup>1</sup>
- ❖ Several local Health Jurisdictions (LHJs) have conducted, or are in the process of conducting, county or other small area preschool immunization coverage surveys. These counties are Thurston, Snohomish, Grant, Grays Harbor, Spokane, Clark, King, Lincoln, Yakima, Whatcom, Benton, Franklin and Kittitas.

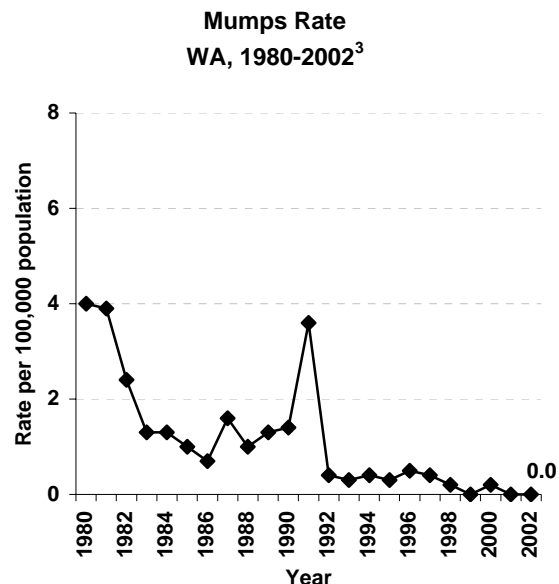
### Immunization Rates



### Measles Disease

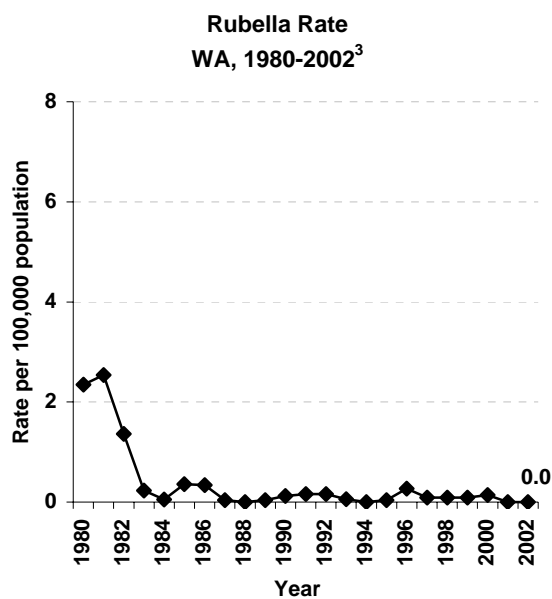


### Mumps Disease

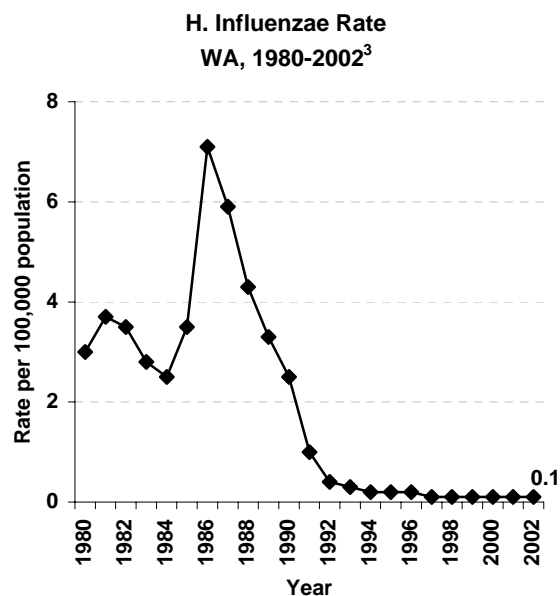


## Immunizations/ Vaccine Preventable Diseases (cont.)

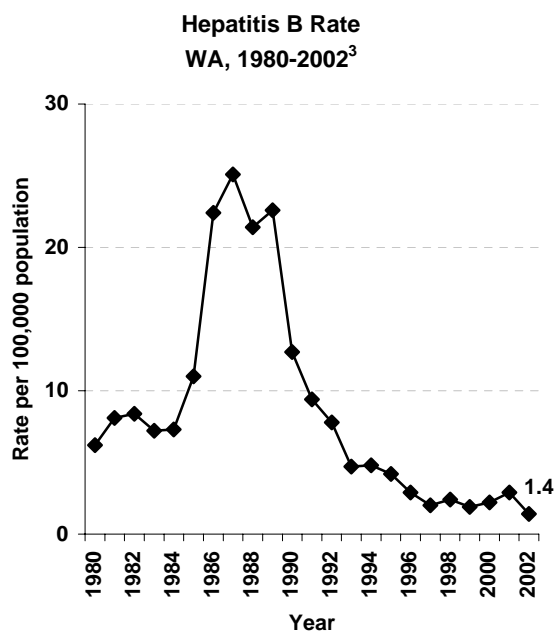
### Rubella Disease



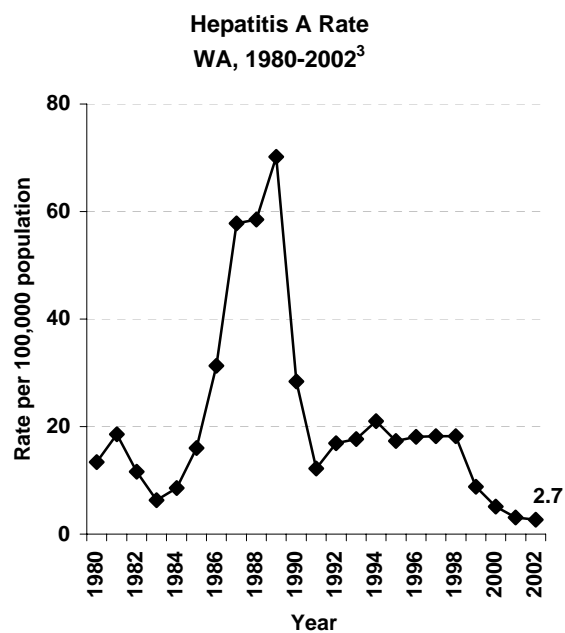
### Haemophilus Influenzae, Invasive Disease



### Acute Hepatitis B Disease

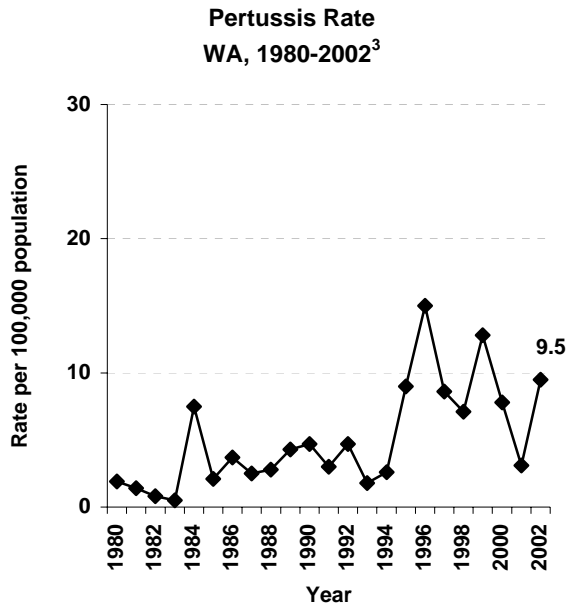


### Acute Hepatitis A Disease



## Immunizations/ Vaccine Preventable Diseases (cont.)

### Pertussis Disease



#### **Data Sources**

- <sup>1</sup> National Immunization Survey, Centers for Disease Control and Prevention.
- <sup>2</sup> IMMENU School Data Software, Washington State Department of Health Immunization Program.
- <sup>3</sup> Washington State Annual Communicable Disease Reports.